



DEPARTMENT OF
TOXIC SUBSTANCES
CONTROL

*The mission of the
Department of Toxic
Substances Control is
to provide the
highest level of safety,
and to protect public
health and the
environment from
toxic harm.*



State of California



Cal/EPA

Proposed Cleanup Plan for CalEnergy Geothermal Facilities in Calipatria, Available for Public Review and Comment

A draft cleanup plan to excavate, remove and transport arsenic and lead contaminated soil at the CalEnergy Geothermal Facilities (CalEnergy) is available for public review and comment. The proposed cleanup plan, called a draft Removal Action Workplan (RAW), was developed specifically for the 4,470 acre CalEnergy facility located in Imperial County, west of Calipatria. Under the California Environmental Quality Act (CEQA), a Negative Declaration has been prepared, as the proposed soil removal and related activities will not have an adverse environmental impact.

There is no immediate risk to the public because the facility is fenced, restricted to facility personnel, and not located near residential or commercial areas. Our agency, the Department of Toxic Substances Control (DTSC), regulates the generation, storage, treatment and disposal of hazardous waste in California. Inside this fact sheet you will find information on:

- Why Cleanup Is Necessary
- Facility Location and History
- Investigations and Findings
- Proposed Soil Cleanup Plan & Safety Measures During Cleanup Activities
- California Environmental Quality Act (CEQA)
- How you Can Participate & Next Steps
- Where To Find Project Documents

NOTICE OF 30-DAY PUBLIC COMMENT PERIOD

A 30-day public comment period is being held to receive public comments on the draft Removal Action Workplan (RAW) and proposed CEQA Negative Declaration. The public comment period begins **December 16th, 2010** and ends **January 17th, 2011**. We invite you to submit your public comments during this time. **Public comments must be postmarked or e-mailed no later than January 17th, 2011, and sent to:**

Ms. Maryam Tasnif-Abbasi, DTSC Project Manager
Department of Toxic Substances Control
5796 Corporate Avenue, Cypress, CA 90630-4732
E-mail: mtasnif@dtsc.ca.gov

The draft RAW and CEQA Initial Study, and other related project documents, are available for public review at the Information Repository locations listed on page 3. We will consider and respond to all public comments received during the public comment period before implementing field work.



Why Cleanup Is Necessary

At the CalEnergy facility, geothermal (steam) energy is used to generate electrical power by bringing superheated brine from the geothermal resource area to the surface, flashing a portion to steam, and injecting the spent brine and condensate back into the geothermal reservoir. Prior to injection, the majority of the insoluble solids are removed from the brine to minimize degradation of the injection wells. Typical activities at the geothermal facilities include generation of filter cake during preparation of brine for injection, temporary storage of brine in brine ponds, and maintenance and storage of piping equipment. During energy production, solids from the extracted geothermal fluids accumulate as scale in facility equipment and pipes, as sediments in brine ponds, and as filter cake at the clarifiers.

During maintenance operations (including high pressure washing of the piping, removal of sediments from the brine ponds, and the removal of filter cake from the clarifiers), these solid scale sediment cake materials were released to on-site surface soils in the vicinity of these maintenance operations. Each of these activities contributed to arsenic and lead contaminated soil impacts on the site at levels that require further cleanup to protect site workers, human health and the environment.

DTSC will oversee the proposed soil excavation, removal and transportation activities and ensure work is performed in a manner protective of human health and the environment.

Facility Location and History

CalEnergy currently operates in Imperial County, within the Imperial Valley, southeast of Salton Sea, and is part of the Salton Sea Known Geothermal Resource Area. The nearest towns are Niland (to the northeast), Brawley (to the southeast) and Westmorland (to the south). The region is used mostly for agriculture and geothermal power plant production. There are five power plant “facilities” on-site (with administrative offices at 7030 Gentry Road) identified as:

Leathers – The Leathers facility is located at 342 West Sinclair Road, Calipatria, and is about 2.7

miles west of State Route 111.

Central Services – The Central Services facility is located at 480 West Sinclair Road, Calipatria, and is about 3.4 miles west of State Route 111.

Elmore – The Elmore facility is located at 786 West Sinclair Road, Calipatria, and is about 5.6 miles west of State Route 111.

Region 2: Vulcan/Hoch Facility – The Vulcan facility, located at 7001 Gentry Road, and Hoch Facility, located at 7029 Gentry Road, are both about 5.6 miles west of State Route 111.

Region 1: Units 1&2, 3&4, 5 – Units 1&2 are located at 6920 Lack Road, Units 3&4 and 5 are located at 6922 Crummer Road, and both units are about 10.6 miles from State Route 111.

Investigations and Findings

During on-site facility investigations, soil sampling was conducted to identify the full nature and extent of soil impacts at areas of concern. The sampling strategy was to identify the presence of metals in surface soils in the vicinity of the areas of concern. The investigations concluded that the chemicals of concern include arsenic and lead in soil at shallow depths ranging from 0.3 to three (3) feet below surface grade.

Proposed Soil Cleanup Plan

To address arsenic and lead impacted soil, the draft RAW proposes:

- 1) Scraping/Excavation: Impacted soil would be excavated from impacted areas to varying depths, up to a maximum depth of four (4) feet below finished grade. Excavation would continue until cleanup goals are met.
- 2) Stockpiling Soil: Excavated soil would be stockpiled onto plastic tarps and covered to prevent fugitive dust. Areas excavated would then be sampled to ensure cleanup goals have been achieved. In the event stockpiles of impacted soil or surface excavations are left overnight, the stockpiles will be properly covered with plastic to reduce emissions.
- 3) Backfilling of Excavated Areas: When cleanup goals have been achieved, the scraped/excavated areas would be backfilled with clean material to

match the existing grade.

4) Transportation: About 3,400 cubic yards (or 263 truck loads) of impacted soil would be transported by covered trucks to a disposal facility licensed to receive such waste.

Safety Measures During Cleanup Activities

Upon approval of the draft RAW, soil cleanup activities will be conducted during facility operating hours. To ensure worker and public safety, the following actions will be implemented to minimize dust during soil scraping, excavation and removal activities:

- Spraying work areas and loading of soil transportation vehicles with clean water to control dust;
- Covering any stockpiled soil with plastic sheeting;
- Securing truck contents with covers before leaving the facility;
- Brushing truck tires of equipment and transportation vehicles entering and exiting the facility to remove soil, dust and debris;
- Monitoring the air quality (including fence line monitoring for dust) to ensure dust levels remain at safe levels, protective of site workers.

Potential Impacts Under the California Environmental Quality Act

DTSC is required by CEQA to review environmental activities for the possibility of impacts, before approving the project. DTSC has prepared an Initial Study and Negative Declaration for this project, as the proposed soil removal and related activities will not have an adverse environmental impact.

How You Can Participate

We want to know what you think of the draft RAW (which describes the proposed soil cleanup activities for arsenic and lead impacted soil) planned for this facility. A 30-day public comment period for the draft RAW and CEQA Negative Declaration begins **December 16th, 2010 and ends January 17th, 2011**. You may provide your comments on either document

during this period. All public comments must be postmarked or e-mailed by **January 17th, 2011** and sent to:

Ms. Maryam Tasnif-Abbasi, Project Manager
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, CA 90630-4732
E-mail: mtasnif@dtsc.ca.gov

At the end of the 30-day public comment period, DTSC will review all public comments received before making a final decision on the draft RAW.

Next Steps

If approved, soil excavation and removal activities are anticipated to begin in early February 2011. The facilities will continue to operate, generating electricity from the geothermal resource during RAW activities.

Where To Find Project Documents

The draft RAW and CEQA Initial Study can be viewed at the following Information Repositories:

Meyer Memorial Library
105 S. Lake Avenue
Calipatria, CA 92233
(760) 348-2630
Mon – Wed: 9 am – 6 pm (closed 1– 2 pm)
Thurs: – 10 am – 7 pm (closed 2-3 pm)
Fri: 9 am – 5 pm
Sat – Sun: Closed

Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, CA 90630-4732
(714) 484-5337
Mon – Fri 8:00AM – 5:00PM
Please contact Ms. Julie Johnson at the number above to make an appointment.

To electronically view the draft RAW, visit: www.envirostor.dtsc.ca.gov/public/. Enter Calipatria in the city section and select CalEnergy from the alphabetical list of sites.

For more information about the CalEnergy facility visit www.EnviroStor.dtsc.ca.gov. For more information about our department, please

visit our website at www.dtsc.ca.gov.

Who to Contact at DTSC for Information

For more information about the CalEnergy facility, please contact:

Ms. Maryam Tasnif-Abbasi, Project Manager
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, CA 90630-4732
(714) 484-5489
E-mail: mtasnif@dtsc.ca.gov

Stacey Lear, Public Participation Specialist
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, CA 90630-4732
(714) 484-5354 or toll free 1-866-495-5651
E-mail: slear@dtsc.ca.gov

Notice to Hearing Impaired

TDD users can contact the California Relay Service at 1-888-877-5378 to reach Stacey Lear, DTSC Public Participation Specialist at (714) 484-5354 or toll-free 1-866-495-5651.

For Media Inquiries

Ms. Sandra Friedman
Public Information Officer
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, CA 90630-4732
(714) 484-5383
E-mail: sfriedma@dtsc.ca.gov

**NOTICE OF 30-DAY PUBLIC COMMENT PERIOD FOR
DRAFT REMOVAL ACTION WORKPLAN (RAW) AND NEGATIVE DECLARATION
FOR CAENERGY GEOTHERMAL FACILITIES, CALIPATRIA, CA**

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